connecting a pressurized fluid supply to the interior of the chamber. In addition, the nozzle has a pin extending through the passage and reciprocal between an extended position and a retracted position. The pin has an enlarged distal portion extending beyond the distal end of the passage. The enlarged distal portion is at least partially within and substantially blocks the passage when the pin is in its retracted position, and has a pressure surface exposed to pressurized fluid supplied through the passage. An actuator is operably coupled to the pin, and reciprocates the pin in cooperation with the pressurized fluid.

In another aspect, the present invention provides a gas assisted injection molding apparatus. The apparatus includes a molding chamber and a supply of pressurized gas. A hollow conduit communicates with the gas supply and extends into the chamber. A pin extends through the conduit and is reciprocal between an extended position and a retracted position, the pin having an enlarged distal portion exposed to fluid pressure from the hollow conduit, positioned at least partially within and substantially closing the conduit when the pin is in the retracted position. An electronic actuator reciprocates the pin in cooperation with said fluid supply pressure.

In still another aspect, the present invention provides a nozzle for the injection of fluid into a molding chamber. The nozzle includes a hollow passage having a tapered first end for connecting a pressurized fluid supply to the interior of the chamber and a pin extending through the passage and reciprocal between an extended position and a retracted position. The pin has an enlarged distal portion with a pressure surface exposed to fluid pressure from the passage. The enlarged distal portion is substantially complementary to the tapered first end of the passage, and substantially blocks the